

# Santa Rosa Junior College

## Program Resource Planning Process

### Construction Management Technology 2014

#### 1.1a Mission

**Architecture Program and Construction Management Program:**

The mission of the **Architecture** transfer program is to provide learning opportunities for students to increase their knowledge and improve their skills in preparation for transfer to a college or university with a major in architecture, or for personal enrichment. Program goals include developing an appreciation and understanding of the design process and the cultural context of architecture.

The mission for the revised **Construction Management** transfer program is to provide learning opportunities for students to increase the knowledge and improve the skills in preparation for transfer to a college or university with a major in construction management, or for personal enrichment. Program goals include developing an appreciation and understanding of the construction process and sustainability issues encountered in the construction industry.

NOTE: The revision of the Construction Management program is in progress. The former certificate programs were discontinued due to changes in the economy and increasing requirement for entry-level construction managers to have a Bachelor of Arts Degree.

#### 1.1b Mission Alignment

Our Program Mission is in alignment with the District's mission and institutional goals and initiatives. For example, the Construction Management program is in the process of re-engineering to reflect changed community needs. In addition, one focus for the revised Construction Management Major will be sustainability and all programs participate in the assessment of Student Learning Objectives.

#### 1.1c Description

**Introduction:**

SRJC used to have certificate programs in both Construction Management and Architecture but at the recommendation of the advisory committee, these programs were discontinued and work began to create transfer majors in both of these areas.

**Architecture:**

The Chancellor's Office approved an A.S. degree in Architecture in 2012. UC Berkeley has approved all but one course for articulation, and has provided guidance for improvements in the one remaining unarticulated course that were implemented in Fall 2013. Cal Poly San Luis Obispo has not responded to multiple requests to approve articulation with its program. Along with the required General Education courses, this transfer program provides all the courses needed for transfer to a UC into the 3rd year of a 4 year program, and to a Cal Poly into the 2nd year of a 5 year program. Basic architecture courses are offered including: Intro to Arch., Visual Communication, Digital Tools - Presentations, Digital Tools - 3-D Modeling, Beginning Design Studio and Architectural History.

The Redwood Empire American Institute of Architects (REAIA) worked with SRJC in developing this program, which they endorse. Although not feasible currently, eventually adding year 2 courses of the 5 year architecture transfer program will be considered. Only one new course per semester would be required (Advanced Architecture Design Studio) once the Construction Management major is initiated, as both programs will require the year 2 Building Materials and Methods of Construction courses being revised for that Major.

#### **Construction Management:**

The two remaining courses needed for the Construction Management degree will be submitted to the curriculum committee in Fall 2014, as will the remaining paperwork required to establish the revised major. Note: A local "green" certificate (Building Home Performance) was created, and initial courses were offered in 2011-12 but were cancelled due to low enrollments. Perhaps with the upturn in the economy this certificate will prove to be viable.

The Construction Management program will provide a path for transfer to a four-year institution for degree completion. Changes in the construction industry are driving this change in focus as there is now a general expectation of a Baccalaureate Degree for entry-level jobs in this field. The program includes courses in The Construction Industry, Construction Documents, How Buildings work, Project Organization and Management, Estimating, Scheduling, Specifications and Materials and Methods of Construction.

## 1.1d Hours of Office Operation and Service by Location

Courses related to the Construction Management program are typically offered in the evening. Courses related to the Architecture program are offered in both the day and the evening.

Our Service Center is open five days a week, staffed by a part-time employee, with coverage that varies by day/evening. It would be helpful to have a full-time administrative assistant to provide better coverage and support for all the programs in the Department.

## 1.2 Program/Unit Context and Environmental Scan

### **Architecture:**

- Have there been any changes in the transfer requirements for this major, particularly at CSU or UC campuses or at other common transfer destinations in this discipline? If so, describe those.

Since we have recently researched and written the curriculum for this program it is current. However, UC Berkeley informed us of a minor change in their programs (a renewed focus on physical model-building) which has prevented articulation with the one remaining unarticulated course. We are responding to that change by incorporating a longer segment of model-building, and rewriting the affected curriculum. Revised Course Outlines of Record will be submitted to the curriculum committee in Fall 2014.

- **Are there trends in industry or technology that could affect this discipline or major?**  
Yes, the transition to computer modeling as a design tool for architecture, and the ability of the software to also produce the construction documentation means that the need for technician/drafters will be declining in the coming years. Concurrently, there will be a need for more professionals. In addition, in Sonoma County more than 50% of the professional architects are eligible for retirement within 3 years. The Redwood Empire American Institute of Architects is concerned about the looming shortage and has been instrumental in support of this program development, and is sponsoring a Mentor program for our advanced students. As a part of the projected second year of the Architecture program, we will incorporate an introduction to a BIM (Building Information Modeling) program.
- **Are there new trends in general education or basic skills that affect courses in this discipline or major?**  
No.
- **What partnerships or cooperative ventures exist with local employers, transfer institutions, or other community colleges?**  
We worked very closely with Cal Poly San Luis Obispo and UC Berkeley in the development of our curriculum, and benefited from consultation with Cuesta College. In addition, as mentioned above, the Redwood Empire American Institute of Architects supports this program, and has sponsored an ongoing a Mentor program for our advanced students.

### **Construction Management: Revised Major**

- **Have there been any changes in the transfer requirements for this major, particularly at CSU or UC campuses or at other common transfer destinations in this discipline? If so, describe those.**  
Consultation with transfer institutions is providing us with the information needed to become current. Many of the courses from the former Certificate program can be used, and are already articulated, and new courses have been developed.
- **Are there trends in industry or technology that could affect this discipline or major?**  
Yes, in the construction industry it is now common for entry-level management positions to require a 4-year degree. Unlike in the past, there is less opportunity to "work your way up" from a field position. In addition, the industry is becoming more technology-dependent in management with sophisticated computer programs used for estimating and scheduling. Our revised Major will address these changed expectations through revised program design.
- **Are there new trends in general education or basic skills that affect courses in this discipline or major?**  
No.
- **What partnerships or cooperative ventures exist with local employers, transfer institutions, or other community colleges?**  
As part of the curriculum development process contact was made with three transfer institutions to discuss their specific transfer needs. Although many of the core transfer courses are similar, there are differences among transfer institutions. As already mentioned

may of the existeing courses can be used for the transfer program, At the local level, a course offered in the Surveying program can be used for this program. There are no specific cooperative ventures with industry at this time other than the generous scholarship programs offered by the Associated General Contractors and a working relationship with the North Coast Builder's Exchange - including participation in their Careers in Construction Expo.

## **Construction Management: Building Performance Certificate**

- **What significant changes have occurred in the labor market that might impact demand for these courses, certificates or majors?**  
The desire to address the needs of the emerging "green" market has led to the development of program to train people to perform energy audits and offer retrofitting services to redress problem found in the audit, or to improve building energy efficiency. However, when the program was offered enrollment did not materialize due to the depressed status of the construction industry at that time. It is not certain when this Certificate program will be offered again.
- **What changes are anticipated over the next three years in this industry that might impact instruction?**  
There will be moderate demand for these services for several years.
- **Are there any requirements of licensing/accrediting agencies related to this program? If so, please explain.**  
Not at this time. Completion of our program will qualify students to continue education to complete certification requirements.
- **Are there trends in industry or technology that could affect this discipline or major?**  
Yes, as part of the "Green" curriculum, this program is sensitive, and responsive, to the needs of a cleaner, more energy efficient and sustainable future. The need for this type of program should increase.
- **Are there new trends in general education or basic skills that affect courses in this discipline or major?**  
No.
- **What partnerships or cooperative ventures exist with local employers, transfer institutions, other community colleges, or local high schools?**  
There are none established at this time, although local industry representatives have been consulted as a part of the Green Grant. This grant is a joint venture with other Community Colleges. In addition a new Advisory Committee will be fomred to oversee this, and other, Green certificates.
- **Has there been an increase or decrease in outside funding resources and/or industry/business support?**  
Yes, we have completed the Green Grant mentioned above, and there are no new funding opportunities at the moment.

## 2.1a Budget Needs

### ***2.1a Budget Needs:***

***Have you implemented any cost savings measures that have saved the District money? If so, describe those. (Do not address schedule reductions, as those are reflected in section 5.)***

*Yes, we have instituted fees in all of the Architecture and Construction Management courses for which we had records of use, to offset allowable reproduction and supply costs experienced by the District on our student's behalf. We will continue this practice as evidence is available from offering new courses. In addition, electronic communication and distribution of some materials is also used. We also have asked our classified staff members to modify their schedules to provide extended coverage through the early evening, since student workers cannot be hired.*

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***How do your budget statistics compare to the district-wide range?***

***In 2012-13 for the Architecture and Construction Management Programs:***

*We are a very small part of SRJC - with just 0.17% of the total expenditures...*

#### **FIGURES for 2012-13**

<i>Annual expenditures of</i>	<i>\$186,999.54: 0.17% of District total (up 76.6% from 2011/12)</i>
<i>Faculty salary/benefit payroll of</i>	<i>\$137,159.88: 0.36% of District total (up 77.41% from 2011/12)</i>
<i>Classified payroll of</i>	<i>\$0</i>
<i>Management payroll of</i>	<i>\$0</i>
<i>Non-personnel costs of</i>	<i>\$ 1,187.84: 0.01% of District total (down 51.04% from 2011/12)</i>

#### **Additional Funds Needed:**

The main area of impact is in lack of support for instructional equipment and inability to hire student lab assistants.

- **Instructional equipment:** Many of the drafting boards in 1752, the drafting lab, are in need of replacement, but our current budget only permits replacement of a few each year, which means students do not have industry standard equipment to learn with
- **Instructional equipment:** Many of the chairs in 1752 are broken, dilapidated and are filthy.
- **Instructional equipment:** Currently the instructor computer in 1752 is not compatible with the programs used - it needs to be updated to a 16 bit machine.
- **Instructional equipment:** Although we have access to the 3-D printing to allow our students to make solid models of their designs, we do not have the funds to provide the materials for the models. We need additional funds to adequately meet our student's needs.

- Student Lab Assistants: On average there are 4 hours of computer-based instruction each semester for the Architecture program, student lab assistants available to help these students would contribute to their success.
- Student Lab Assistants: In general ALL the programs in the ApTech department are technology intensive and would benefit from additional student lab assistance...

## 2.1b Budget Requests

Rank	RS	ACTV	Object	Location	SP	M	Amount	Brief Rationale
0001	73	0909	0000	Santa Rosa	04	07	\$7,800.00	Chairs in Drafting Lab - 1752 need to be replaced. Many are not working properly and they are filthy.
0002	73	0909	0000	Santa Rosa	04	07	\$5,625.00	Replace drafting boards and parallel rules
0003	73	0909	0000	Santa Rosa	04	07	\$2,000.00	Instructor computer for 1751 - current computer is unequal to the needs
0004	73	0909	0000	Santa Rosa	01	01	\$22,000.00	Student Lab Assistants - many ApTech programs: estimate 40 hours per week @ \$10/hr for the academic year and summer sessions

## 2.2a Current Classified Positions

Position	Hr/Wk	Mo/Yr	Job Duties
None for Architecture and Cons	0	0	
See Applied Technology	0	0	

## 2.2b Current Management/Confidential Positions

Position	Hr/Wk	Mo/Yr	Job Duties
None for Arch and Cons	0	0	

## 2.2c Current STNC/Student Worker Positions

Position	Hr/Wk	Mo/Yr	Job Duties
None	0	0	

## 2.2d Adequacy and Effectiveness of Staffing

### Calculations from Core Data

**NOTE: Problem with this data is that it includes Lynda Williams as a faculty member for this program and she teaches Physics - so all of the salary and benefit information is INCORRECT**

Data Element	Value	Change from 2011-12	District Total	% of District Total
FTE-S : FTE-F	8.8331	-37.84%	28.3270	31.18%
FTE-AF : FTE-CF	0.0569	-84.82%	1.3077	4.35%
FTE-F : FTE-SS	0.0000	0.00%	1.0235	0.00%
FTE-F : FTE-M	0.0000	0.00%	5.4039	0.00%
FTE-SS : FTE-M	0.0000	0.00%	5.2796	0.00%
FTE-ST : FTE-C	0.0000	0.00%	0.1268	0.00%
Average Faculty Salary per FTE-F	\$64,887.53	15.38%	\$58,570.50	110.79%
Average Classified Salary per FTE-C	\$0.00	0.00%	\$44,716.87	0.00%
Average Management Salary per FTE-M	\$0.00	0.00%	\$75,957.24	0.00%
Salary/Benefit costs as a % of total budget	99.36%	1.70%	75.90%	130.92%
Non-Personnel \$ as a % of total budget	0.64%	-72.29%	12.71%	5.00%
Restricted Funds as a % of total budget	0.00%	-100.00%	11.39%	0.00%

Total Unit Cost per FTE-F	\$88,463.76	14.90%	\$170,777.67	51.80%
Total Unit Cost per FTE-C	\$0.00	0.00%	\$273,966.16	0.00%
Total Unit Cost per FTE-M	\$0.00	0.00%	\$922,860.52	0.00%
Total Unit Cost per FTE-S	\$10,015.06	84.86%	\$6,028.78	166.12%
Total Unit Cost per student served/enrolled	\$629.61	6.48%	\$3,658.53	17.21%

#### **Needed Position: Student Lab Assistants**

We need to have lab assistants for our computer lab classes. For architecture that includes Arch 60A and Arch 27. Student lab assistants used to be standard and could help reduce the strain on the instructor. Adding 7 hours of student lab assistance per semester would help the students in these courses.

**Adequacy:** The lack of student lab assistants affects many of our courses and the students. We need to reinstate the student lab assistants.

#### **Needed Position: Full-time Administrative Assistant**

The position of Administrative Assistant serves all 12 of the programs in the department, though service to the two programs in Petaluma are largely fulfilled there. Because the disciplines are so diverse and the needs vary, the job for the Administrative assistant is large. The administrative assistant serves 4 full-time faculty and approximately 50 adjunct faculty.

#### **Adequacy:**

There have been occasions when there has not been enough time to get thing done in a timely fashion. Plus there is stress associated with having to deal with so many different people and programs in a limited amount of time. We need a full-time administrative assistant.

#### **Unfilled Positions:**

One department faculty position (Civil Engineering Technologies) is unfilled.

Currently the one regular faculty member in this program is on a reduced load of 60%, and is the Department Chair, which reduces the teaching portion of load to about 30%. This has meant hiring more adjunct faculty for the program and increased coordination time.

Overall for the Department:

- 7: 2012/13 there were 13 separate programs and 7 full-time faculty members associated with this department, down one from the previous year due to a faculty member's migration to administration.
- 4: 2014/15 The Physics program move to Chemistry reduced this by 3 full-time faculty member and one program leaving 12 separate programs. The department experienced difficulty in completing adjunct evaluations, completing PRPPs and curriculum review.
- 3: As of December 2014 another faculty member will retire, leaving 3 full-time faculty members (one of which is on a reduced load). Still 12 programs...
- 2: In Dec. 2015 another faculty member plans to retire, and the full-time Engineering faculty member will be on sabbatical in Spring 2016. Still 12 programs...
- 1: In May 2016 another full-time faculty member plans to retire. Still 12 programs...
- That will meant there will be one full-time faculty member for the entire department. It is unlikely that any college work will be done...

2.2e Classified, STNC, Management Staffing Requests

Rank	RS	ACTV	Location	SP	M	Current Title	Proposed Title	Hrly	Type	Salary Increase	Benefits Increase	Total Increase
0000	73	0000	ALL	00	00	See Applied Technology PRPP		\$0.00	Classified	\$0.00	\$0.00	\$0.00



## 2.3a Current Contract Faculty Positions

Position	Description
One	<p>Full-time faculty member in Architecture who is currently exercising the early retirement option with a reduced load of 60%. In addition this person is responsible for coordinating the AND Construction Management programs - this includes revising programs, writing curriculum, persuing articulation, adjunct hiring and training, maintaining industry and tranfer institution contact, and coordination of ARCH - the architecture club. Currently this person is the Department Chair. Anticipated retirement May 2016.</p> <p>Note: the Core data incorrectly lists two faculty positions for this program, one of which is actually a physics instructor.</p>
None	<p>The original Applied Technology department was the "construction industry" department home to most of the SRJC programs related to building and design, now including Engineering, Architecture, Construction Management, Civil Engineering Tech., Drafting Tech (CADD), Surveying Tech., Geospatial Tech., Solar Photovoltaics, Water Utility OperationsTech. and Wasterwater Treatment Operations Tech. (Related programs in other departments include Interior Design and Landscape Design - which we would welcome). The construction industry is a vital part of Sonoma County's economy. With the ongoing recovery of the construction industry we need to be positioned to serve it well again. The department needs to initiate the revised Construction Management program and the District needs to create a full-time position which will enable the college to meet the changing needs of the industry, including green building, alternative energy in construction, building inspection, and to teach the revised Construction Management program. This new hire will become the main resource faculty person for the construction industry.</p>
Other	<p>This department is experiencing exigent circumstances due to loss of faculty, since one former department member has become a Dean, one full-time faculty member will retire in December 2014, one in December 2015 and one in May 2016. Only one full-time faculty member will be teaching in Spring 2016 because the other full-time faculty member will be on sabbatical in Spring 2016. After that there will be only one full-time faculty member. A department cannot function with 12 programs, 80 adjunct faculty and one full-time faculty member.</p>

## 2.3b Full-Time and Part-Time Ratios

Discipline	FTEF Reg	% Reg Load	FTEF Adj	% Adj Load	Description
Architecture and Construction Management	0.6000	30.0000	1.1700	116.6700	As the Architecture program is currently being offered the load for Fall = 126.67% and the load for Spring = 106.67%. Currently the Construction Management offerings are 30% each semester. That averages out to an annual FTEF of 146.67. Note: the architecture faculty member is also the department chair on reduced load, so only teaches +/- 30% each semester. There are currently 3-4 architecture adjunct faculty teaching each semester. In addition there are 2 adjunct faculty members associated with the Construction Management program. The Core Data is incorrect listing a second full-time faculty member, and noting only 2 adjunct faculty members...
Construction	0.0000	0.0000	0.3000	30.0000	Currently only two Construction Management courses are offered each semester with a 30% load in each semester. When the revised program begins that load will increase...

## 2.3c Faculty Within Retirement Range

### **2.3c: Faculty within retirement Age:**

The only full-time faculty member serving both the architecture and construction management programs is within retirement age and is working a reduced load intending to retire in May 2016. To maintain continuity in the Architecture program a new faculty member should be considered for hire in this area upon retirement of the current faculty member, if not before. That person could also manage the Ap. Tech courses and computer labs, as the current full-time faculty member in that area will be retiring Dec. 2015.

### **Impact of retiring full-time faculty:**

Overall for the Department:

- 7: 2012/13 there were 13 separate programs and 7 full-time faculty members associated with this department, down one from the previous year due to a faculty member's migration to administration.
- 4: 2014/15 The Physics program move to Chemistry reduced this by 3 full-time faculty member and one program leaving 12 separate programs. The department experienced difficulty in completing adjunct evaluations, PRPPs and curriculum review.
- 3: As of December 2014 another faculty member will retire, leaving 3 full-time faculty members (one of which is on a reduced load). Still 12 programs... still the same amount of work - just fewer people to do it, likely less will be done.
- 2: In Dec. 2015 another faculty member plans to retire, and the full-time Engineering faculty member will be on sabbatical in Spring 2016. Still 12 programs...
- 1: In May 2016 another full-time faculty member plans to retire, leaving one full-time faculty member. Still 12 programs...
- One full-time faculty member for the entire department. It is unlikely that any college work will be done...

## 2.3d Analysis of Faculty Staffing Needs and Rationale to Support Requests

### **2.3d: Analysis**

#### **Recruitment:**

Both Architecture and Construction Management are highly technical fields with employees receiving good pay - better as experience increases - better still if a person owns their business/practice. The college often cannot compete in this arena.

**Architecture:** The architecture program had a recruitment about 18 months ago and added 7 of the 8 applicants to the pool. A recruitment is planned for Fall 2014. The difficulty with recruiting architecture instructors is that most are working and cannot teach multiple courses, or have time conflicts with classes offered during the day.

**Construction Management:** Since the Certificates were discontinued, and permission to implement the revised transfer program was put on hold due to economic conditions, there has not been a recent recruitment. A recruitment is planned for Fall 2014. The difficulty with recruiting construction management instructors is that most are working and cannot teach multiple courses, or have time conflicts with classes offered during the day.

**Adequacy:**

There are currently adequate adjunct faculty available for both programs as currently offered.

The case could be made that due to reduced load and department chair re-assigned time there is not adequate full-time faculty for the architecture program. However, until May 2016 the architecture program can continue as is, but not the construction management program. The construction industry is a vital part of Sonoma County's economy. With the ongoing recovery of the construction industry the college needs to be positioned to serve it well again. The construction management program is needed and creating a full-time position will enable the college to meet the changing needs of the industry, including green building, alternative energy in construction, building inspection, and to teach the revised construction management program. This new hire will become the main resource faculty person for the construction industry.

**Background:** The Applied Technology Department merged with the Engineering/Physics Department in 2011, and Electronics before that. The Physics program moved to the Chemistry department effective Fall 2014. The current configuration of the Department consists of 4 full-time faculty members and over 40 adjunct instructors teaching 12 different programs. There is one full-time faculty coordinator for the Design/Drafting Tech courses and Animation program (retiring Dec. 2015), one for the Engineering program, one for the Electronics and Solar Photovoltaics program (retiring Dec. 2015), while the Architecture and Construction Management programs share a full-time (albeit reduced load) faculty coordinator (retiring May 2016).

Neither of the water programs has a full-time faculty coordinator. Nor do the Civil Engineering Tech., Surveying Tech. and Geo-Spatial Tech. programs. Since the full-time coordinator of the Electronics and Solar Photovoltaics program is retiring Dec. 2014 - that will add two more programs without a full-time faculty coordinator. The lack of full-time leadership has had a negative impact on these programs. However wonderful the adjunct faculty are (and the ones in this department are outstanding) they cannot be expected to understand how the system works or to participate fully in the life of the institution, or complete the work of the college (evaluations, planning, curriculum, etc...). They do, however, provide a needed contact for students in their programs.

But it gets worse... This department is experiencing exigent circumstances due to loss of faculty, since one former department member has become a Dean, one full-time faculty member will retire in December 2014, one in December 2015 and one in May 2016. Leaving only one full-time faculty member. And, only one full-time faculty member will be teaching in Spring 2016 because the continuing full-time faculty member will be on sabbatical. There have been no new full-time hires in the department since 1993 (other than in the Physics program which is no longer part of our department).

A department cannot function with 12 programs, 50+ adjunct faculty and one full-time faculty member, or practically speaking even with 2 or 3. The department already is

experiencing the impact, and extreme stress, of fewer people to do the work of the college.

### **Vision for the future:**

The original Applied Technology department was the "construction industry" department, home to most of the SRJC programs related to design, building and infrastructure, now including Engineering, Architecture, Construction Management, Civil Engineering Tech., Drafting Tech. (CADD), Geospatial Tech., Solar Photovoltaics, Surveying Tech., Water Utility Operations Tech. and Wasterwater Treatment Operations Tech. (Related programs in other departments include Interior Design and Landscape Design - which we would welcome). The construction industry is a vital part of Sonoma County's economy a reconfigured department with adequate full-time faculty can address the industry needs. Under this model the Electronic Tech program may be better suited in the Trade Tech. department.

The department, however, cannot quite agree on a name. Architecture, Engineering and Construction might very well be the appropriate name for our department, as we move forward, or possibly Engineering, Architecture and the Built Environment, or perhaps Engineering, Architecture and Related Technologies. We need help in reaching a decision...

### **Needed Full-time Positions:**

**One position needs to be filled/replaced ASAP.** Three other full-time positions will be vacant in the very near future.

With the implementation of a Construction Management Transfer program, the college could be best served by a new "umbrella" position of a "**Engineering Technologies/Construction Management**" instructor who is qualified to teach in one or more of the following fields: construction management tech., civil engineering tech., surveying tech., geospatial tech., solar photovoltaics tech., water utilities operations tech. or wastewater operations tech..

This "umbrella" position can oversee and coordinate the related disciplines identified above. Note: once the construction management program is implemented there will sufficient courses for a faculty member to teach in that discipline. Likewise a sufficient load exists in combination of the other disciplines. The disciplines the faculty member is qualified to teach will determine the final assignment. Essentially this position can be considered a very delayed replacement, or as a consolidation of adjunct assignments.

**Position for next year:** A second "umbrella" position for "**Architecture/Drafting Technology**" needs to be filled 2015-16 or 2016-17 at the latest. This position will coordinate the Architecture Transfer program, Drafting/Design offerings, the 3D Modeling and Animation certificate and major (assuming it remains in the department and is not moved to Computer Studies), and possibly an array of architecture-oriented programs that currently exist within other departments (Interior Design, Landscape Design), if they are moved to this department. This is ONE replacement position TWO

current full-time faculty members: drafting technology AND architecture - both of whom are planning to retire by Dec. 2015 and May 2016 respectively. An architect should occupy this position in order to maintain articulation relationships with transfer institution. Either program can sustain a full-time load, although an architect faculty member would likely be qualified to teach in both areas.

**New Duties Engineering:** The electronics program could be coordinated by the coordinator of the Engineering program until the Electronics program revitalization process is completed, then a full-time faculty member will be needed in this area. Or until the program is moved to Trade Tech. if that is deemed appropriate.

The net result of this reconfiguration is that four full-time faculty positions are being replaced with two "umbrella" positions currently with one more to be added later, and a more cohesive and functional department would emerge. As programs grow and consolidate within the department additional position can be sought - for example computer animation, interior design or landscape architecture may emerge as a viable independent program with needs significantly different from the other programs in the department.

**Impact release time etc:**

Lack of full-time faculty member for program coordination in the Civil Engineering Tech., Surveying Tech, and Geospatial Tech. area as well as for both of the water programs and soon in the Electronics area, is impacting these requests. There is too much for a part-time faculty member to do without functional knowledge of the institution or adequate compensation.

## 2.3e Faculty Staffing Requests

Rank	RS	ACTV	Location	SP	M	Discipline	SLO Assessment Rationale
0001	73	0909	ALL	02	01	Civil Engineering/Construction Mgt. Tech.	There is no full-time faculty member to oversee these programs, update the curriculum, or coordinate the effort needed to verify that SLOs are being adequately addressed in these discipline areas. The construction management program is a newly revised program that also needs attention in the articulation area as well as in the establishment of industry connections. Several of the Civil Engineering Technologies programs are in the process of being reviatlized to better align with the needs of the industry. This would benefit from a full-time faculty member's attention and commitment. Likewise industry contacts are needed in this area as well. In order to serve our community and provide appropriate learning for our students, and to maintain academic excellence, this position is needed.
0002	73	0909	ALL	02	01	Architecture/Drafting Tech	Coordination of the Architecture program requires maintaining contact with transfer institutions as well as with the local professional community. In addition, attention to the work of adjunct facutly must be maaintined to verify that transfer institution requiremnents are being met. Without the oversight of a full-time faculty member there is no guarantee that of that happening.

## 2.4b Rational for Instructional and Non-Instructional Equipment, Technology, and Software

### **Equipment adequate:**

1. Chairs are needed in 1752. The current chairs are dirty and many are not functioning properly.
2. Drafting boards and parallel rules for 1752: The drafting boards in 1752 are in need of major repair or replacement, and several parallel rules need to be replaced.
3. An up-to-date computer is needed in 1752, currently it is not possible to demonstrate all that is needed in that classroom.

### **Equipment standards:**

1. Chairs, boards and rules, and computers are not what you would find in the work environment

### **Equipment needs:**

Equally important first priority:

1. Chairs for 1752
  1. Drafting boards
  1. Chairs for 1799
- 
2. Computer for 1752 is second priority
  3. Projectors for 1751 and 1799 are third priority

### **Sharing:**

All of the labs in Shuhaw Hall are shared with other Departments: Applied Graphics, Landscape Design and Engineering. They are considered part of our physical plant, so our department makes the requests.





## 2.4e Safety, Utility, and ADA Impacts

See ApTech PRPP for information regarding computer labs.  
Drafting lab seems to be adequate in this regard.

## 2.5a Minor Facilities Requests

Rank	RS	ACTV	Location	SP	M	Time Frame	Building	Room Number	Est. Cost	Description
0001	73	0909	Santa Rosa	06	07	Urgent	Shuhaw Hall	1799	\$5,000.00	Create exterior entry to room at back of 1799. Convert portion of little used space provided for occasional applied graphics use to accommodate a table and chairs for meetings with faculty and small groups of students. Would require a new outside door. This is an update to the previous request of \$1000, which was not sufficient to undertake the work.

## 2.5b Analysis of Existing Facilities

Other than the status of the furniture, the equipment in the Drafting Lab is adequate. Improvements are made to accommodate ADA requirements as needed. Typically our labs have general ADA access that need to be updated for specific student use.

## 3.1 Diversify Funding - Grants/Contracts

NA

## 3.2 Cultural Competency

**Recruit:** We advertise our needs through the college, which includes acknowledgement of the need for cultural awareness, and ask them to target communities where qualified individuals can be found.

**Applicant Sensitivity:** During the interview, we query applicants about their understanding of the diverse needs of our students.

**Ongoing:** Periodic discussions about responding to our student's diverse needs are part of department meetings. In addition several of the courses, such as Architecture History, specifically address cultural issues.

## 3.3 Professional Development

We include Classified Staff in all planning efforts undertaken by the Department and arrange their duties to accommodate desired professional development opportunities.

The department holds an all-department meeting once each semester where needs of the college are discussed (SLO assessment, for example) and program planning can occur.

Currently the department is not in agreement regarding what name to adopt as we approach the future. It may be useful to have a facilitated meeting among the regular faculty to move this topic forward.

## 3.4 Safety and Emergency Preparedness

BUILDING AND AREA SAFETY COORDINATORS						
Bldg #/Name	BSC Area	ASC Area	Department	Name	Responsible Area	Phone
<i>Applied Technology, Engineering &amp; Physics - Bussman Hall</i>						
Bussman Hall #1400				To Be Decided	Bussman Hall	Employee Phone #

Bussman Hall #1400	Bussman South Offices	Bussman Service Center	Reina Martinez	Bussman Hall rm. 1471-1478	707-524-1535
Bussman Hall #1400	Bussman Classrooms	STEM Dean (Asst.)	Lynn Dolce	Bussman Hall rm. 1447 - 1454	707-527-4400
<b>Applied Technology, Engineering &amp; Physics - Shuhaw Hall</b>					
Shuhaw Hall #1700	Shuhaw North Wings	Applied Technology, Engineering & Physics (ATEP)	Greg Davis	Shuhaw Hall rm. 1751 - 1799	707-527-4750

### 3.5 Sustainable Practices

We have instituted the practice of emailing students their handouts and assignments, which saves the District resources (but not the student...). In addition several of the course that we offer, in both architecture and construction management, include sustainability issues as a part of their curriculum.

### 4.1a Course Student Learning Outcomes Assessment

#### 4.1a Course SLOs

- Obviously, grades given to students reflect their mastery of the subjects. Several courses also have periodic or end of semester evaluation forms filled out by students to determine their perception of what they have learned.
- Feedback from students is used to guide future development and fine-tuning of courses.
- By getting information directly from students I have been able to determine how to augment current teaching to emphasize the areas that students need more time/help with. This leads to changes in course organization and development of assignments. Data available upon request.
- As we develop our new Architecture Transfer program we will also develop assessment tools for gauging student success.
- Further as we improve our Construction Management program to reflect "green" technologies and revise our Construction Management Major, student learning outcomes will be studied and assessments undertaken.

Now that our new architecture program has stabilized, it is our intention to assess each Architecture course once every two years, typically with a general feedback instrument as well as specific targeted assessments:

Arch 12:	2012, 2014 (exam question)	Arch 2.1:	2013, 2015 (exam question)
Arch 25A:	2012, 2014 (portfolio)	Arch 26A:	2013, 2015 (portfolio)
Arch 25B:	2012, 2014 (portfolio)	Arch 26B:	2013, 2015 (portfolio)
Arch 60A:	2012, 2014 (final project)	Arch 27:	2013, 2015 (final project)

Arch 2.1: 2013, 2015 (exam question) Arch 2.2: 2014, 2016 (exam question)

Arch 2.3: 2014, 2016 (exam question)

Cons 62: Once each year (project) Cons 183: 2014, 2014 (exam)

This year (2014-15) almost all of the architecture courses will be revised. Some of our Architecture courses are sequenced and the SLOs do align. However, the sequence itself has not been assessed. That can be done as part of the curriculum review process. Also this year, the final curriculum and program sequence will be submitted for the revised Construction Management program. Some of those courses are sequenced and the SLOs do align. However, the sequence itself has not been assessed. That can be done as part of the program establishment process.

## 4.1b Program Student Learning Outcomes Assessment

### 4.1b Program SLOs

#### Program Student Learning Outcomes:

##### Architecture:

To prepare students for a successful transition to an Architecture Degree Program by offering learning opportunities in the areas of: the architectural profession, drawing and drafting, use of digital tools for architects, design studio, building technology, and global architectural history.

##### Construction Management:

The Construction Management program does not exist at the moment. Program SLOs will be submitted when the program is re-activated.

#### Assessments:

- A program-level assessment was begun in the Architecture program in 2013-14, and will be completed in 2014-15 once curriculum changes are finalized.

#### Background:

The Architecture program recently completed a complete assessment and reorganization from Certificates to a Degree. The degree was approved in Spring 2012. The Construction Management program is currently involved in that process. The outcome of the assessments was to create Major programs instead of Certificate programs. In addition the decision was made to create a very short Certificate in Home Building Performance.

Our Architecture program now is aligned with requirements of transfer institutions, although articulation is not complete. One course is left for articulation with UC Berkeley. No response has been received from Cal Poly SLO - and Cal Poly Pomona does not articulate their courses. This is the highest priority for the architecture program for the coming year. Curriculum is being rewritten and a new portfolio of student work

has been assembled to reflect the weaknesses identified in the first submission. No one is quite sure what to do about Cal Poly SLO...

Our programs support Student Learning:

- By keeping curriculum current and providing individual consultation with students if they are struggling.

Routine Assessment is accomplished by:

- Obviously, grades given to students reflecting their mastery of the subjects. Several courses also have periodic or end of semester evaluation forms filled out by students to determine their perception of what they have learned.
- In addition, SLO assessments are carried out.

Knowledge for improvement comes from several sources:

- Coordination with transfer institutions will be playing a much greater role in directing program improvement, for both architecture and construction management
- Feedback from students is used to guide future development and fine-tuning of courses.
- By getting information directly from students I have been able to determine how to augment current teaching to emphasize the areas that students need more time/help with. This leads to changes in course organization and development of assignments. Data available upon request.

Assessments:

- Of the students no program -level assessment has been attempted yet since both programs are in transition. However a formal program assessment will be undertaken in the Architecture program in 2013-14.

## 4.1c Student Learning Outcomes Reporting

Type	Name	SLO Identified	SLOs on Web	Assessment Methodology Identified	Student Assessment Implemented	Assessment Results Analyzed	Change Implemented
Course	Arch 12	Spring 2008	Spring 2008	Fall 2010	Fall 2011	Fall 2011	Spring 2012
Course	Arch 12	Spring 2008	Spring 2008	Fall 2010	Fall 2011	Spring 2014	Fall 2014
Course	Arch 15	Spring 2008	Spring 2008	N/A	N/A	N/A	N/A
Course	Arch 2.1	Spring 2010	Spring 2010	Spring 2011	Spring 2010	Spring 2014	Fall 2014
Course	Arch 2.1	Spring 2010	Spring 2010	Spring 2011	Spring 2010	Fall 2011	Spring 2012
Course	Arch 2.2	Spring 2010	Spring 2010	Spring 2011	Fall 2012	Fall 2012	Spring 2013
Course	Arch 2.3	Spring 2010	N/A	N/A	Fall 2011	Fall 2013	Spring 2014
Course	Arch 2.3	Spring 2010	N/A	N/A	Fall 2011	Fall 2011	Fall 2013
Course	Arch 25A	Spring 2009	Spring 2009	Fall 2010	Fall 2010	Fall 2010	Fall 2011
Course	Arch 25A	Spring 2009	Spring 2009	Fall 2010	Fall 2010	Fall 2013	Fall 2014
Course	Arch 25B	Spring 2009	Spring 2009	Fall 2010	Spring 2011	Spring 2011	Spring 2013
Course	Arch 25B	Spring 2009	Spring 2009	Fall 2010	Spring 2011	Spring 2013	Spring 2014
Course	Arch 26A	Spring 2009	Spring 2009	Fall 2010	Fall 2011	Fall 2013	Spring 2013
Course	Arch 26B	Spring 2009	Spring 2009	Fall 2010	Spring 2011	Spring 2014	Spring 2015
Course	Arch 27	Spring 2009	Spring 2009	Fall 2010	Spring 2011	Spring 2011	Fall 2013
Course	Arch 27	Spring 2009	Spring 2009	Fall 2010	Spring 2011	Spring 2014	Spring 2015
Course	Arch 56	Spring 2009	Spring 2009	Spring 2009	Spring 2010	Spring 2010	Spring 2011
Course	Arch 60A	Spring 2009	Spring 2009	N/A	Spring 2012	Fall 2013	Spring 2014
Course	Cons 183	Spring 2009	Spring 2009	N/A	Spring 2012	Spring 2014	Fall 2014
Course	Cons 62	Spring 2009	Spring 2009	N/A	Spring 2012	Spring 2014	Fall 2014



## 4.2a Key Courses or Services that address Institutional Outcomes

Course/Service	1a	1b	1c	2a	2b	2c	2d	3a	3b	4a	4b	5	6a	6b	6c	7
ARCH 12			X	X	X		X	X	X	X	X		X	X	X	X
ARCH 15			X	X	X		X	X	X	X	X	X	X	X	X	X
ARCH 156		X		X	X			X		X	X	X				
ARCH 181				X	X			X		X	X					
ARCH 25A		X	X	X	X			X	X	X	X	X			X	X
ARCH 25B		X	X	X	X			X	X	X	X	X			X	X
ARCH 26A		X	X	X	X			X	X	X	X	X	X			X
ARCH 26B		X	X	X	X			X		X	X	X				X
ARCH 27		X	X	X	X			X	X	X	X	X	X			X
ARCH 56	X			X	X			X		X	X	X				X
ARCH 60A		X	X	X	X			X	X	X	X	X	X			X
ARCH 65.1			X	X			X	X	X	X	X		X	X	X	X
ARCH 65.2			X	X			X	X	X	X	X		X	X	X	X
ARCH 65.3			X	X			X	X	X	X	X		X	X	X	
ARCH 70A				X	X			X						X		
ARCH 71A	X			X	X			X		X	X					X
ARCH 71B	X			X	X			X		X	X					X
ARCH 80A	X			X	X			X		X	X	X		X		X
ARCH 80B					X			X								
ARCH 81	X			X	X			X	X	X	X	X		X		X
ARCH 82	X	X		X	X			X	X	X	X	X		X		X
ARCH 83	X	X		X	X			X		X	X	X		X		
CONS 50	X	X		X	X			X		X	X					
CONS 60	X			X	X			X		X						
CONS 61	X			X	X			X		X						
CONS 62	X			X				X	X	X	X					X
CONS 63	X		X	X				X	X	X	X	X				X
CONS 70A				X	X			X		X	X		X			X
CONS 70B				X	X			X		X	X		X			X
CONS 71A	X		X	X	X			X	X	X	X	X	X			
CONS 71B	X		X	X	X			X	X	X	X	X	X			X
CONS 72	X			X				X		X	X					
CONS 73	X	X		X	X			X		X	X					
CONS 74	X	X		X				X		X	X					
CONS 75		X	X	X				X		X	X					X
CONS 84	X		X	X				X	X	X	X	X	X			X

## 4.2b Narrative (Optional)

## 5.0 Performance Measures

### 5.0

Both the Architecture and Construction Management Programs are in transition, due to changing circumstances in industry which affect the needs of our students.

- The Architecture Program is just completed the first year of re-sequenced operation as a result of responding to changing student needs. Academic year 2013-14 re-introduced the second year of the program and saw the offering of an additional section of the two beginning courses. However, we are building the program, and there will be periods of low enrollment. In addition, Architecture typically has a high "drop-out" rate, which also contributes to low enrollment.
- 2013: there were 3 transfer students from the architecture program
- 2014: there were 3 more
- Essentially we are drastically reducing course offerings in the Construction Management program until we implement the revised Major (estimated to be complete

Fall 2014). Because there have been no jobs in the construction industry for the past few years, our Certificate enrollment was affected. The revised major should address many of these concerns and lead to higher enrollments. There is increasing need for construction managers in Sonoma County.

## 5.1 Effective Class Schedule: Course Offerings, Times, Locations, and Delivery Modes (annual)

### Enrollment Headcount:

Architecture:	F12	75	S13	50
	F13	53	S14	57
	F14	119		
Construction	F12	35	S13	23
Management	F13	27	S14	42
	F14	28		

**A balanced schedule** convenient to students is our goal. With the switch to the architecture transfer program, most courses are scheduled during the daytime. Those courses that also serve the larger community, like the digital tools courses, will be offered in the evening. In addition second sections of the introductory courses will be offered in the evening.

The construction management courses are currently offered in the evening.

**Geographic distribution:** Due to facility and technology needs most of our classes cannot be accommodated in Petaluma or at other sites.

**On-line:** Due to the technical nature of our discipline, and lab components on many of them, most of our classes are not appropriately offered on-line or telecast.

**Demand:** In order to build enrollments in the architecture program, additional sections of introductory courses need to be offered in spring and summer. Spring 2014 saw the first instance of this practice. This year we will offer the introductory classes in the summer as well.

**Serve students:** There are community construction industry needs not being addressed. The proposed transfer program addresses the needs of the industry that has shifted from on-the-job training to the expectation of entry level managers having a BA. By developing a Green Certificate and a Construction Inspection program identified community needs could be met. We need to hire a full-time faculty person to develop this program and promote our existing program. In the architecture area, we are sending students to 4-year colleges. We also enjoy a close relationship with the architecture community, which supports the program.

### Enrollment Trends:

Architecture: The trends in enrollment reflects the economic downturn in the construction industry - which, happily, seems to be improving. Courses have been offered at different times and seem to have established a pattern that works well for the architecture students to allow them to also complete their general education requirements. There is always a conflict with physics courses in the fall semester, but both programs work to resolve conflicts. In order to ensure enrollment in advanced classes, we should consider offering the beginning classes three times each year - in the Fall and Spring semesters, and during summer session. Although the enrollments for F 2014 show a marked increase, enrollments for S 2015 may decline as is a pattern in this program.

Construction: Currently we are offering only 2 construction courses that are required for other certificates, and the Cal OSHA course is not offered every semester.

**Completion time:** It is too early to evaluate the new course offering patterns - but two years will be sufficient for students who do not have extensive developmental work to complete in mathematics and English.

**Marketing:** Outreach efforts have been established with contacts advertising the new architecture program through the AIA, American Institute of Architects, and also mailing to high school principals, counselors and architecture/construction-related faculty. In addition faculty visited high school classes and participated in the SRJC Career Fair and NCBE Construction Day for High School students.

## 5.2a Enrollment Efficiency

### 5.2a

The efficiency goal for is **95% or more** of seats filled at first census based on class limit for fall or spring, and **85%** for summer. In these two programs enrollment is typically stronger in the Fall and weaker in the Spring.

Efficiency:	Fall	Spring
Architecture	F11 94.9%	S12 59.2%
	F12 98.1%	S13 79.6%
	F13 94.4%	S14 no data yet
Construction:	F11 69.1%	S11 83.3% (this is for two courses only)
	F12 86.7%	S12 75%
	F14 93.3%	S14 no data yet

In the architecture program the Spring schedule sees the continuation of courses started in the Fall, and not all students continue. Enrollments in advanced architecture courses could be improved by offering the beginning classes in both semesters and the summer. The increase in enrollment efficiency in S13 perhaps reflects offering the beginning classes for the first time in a spring semester.

Enrollments in Construction management are for the blueprint reading course and for a Cal OSHA safety course required for the Solar Photovoltaics certificate. Over the past three years the trend has been for increasing enrollments in the Fall, but a drop in the Spring. Since the courses are offered for general interest and for other certificates, enrollments are likely to be stable at the current levels. When the Construction Management transfer program is implemented it is likely to see more efficiency in these enrollments as the student cohort becomes identified with the program. Finally, having a full-time construction management faculty member would allow for more promotion of the program and student recruitment activities.

## 5.2b Average Class Size

### 5.2b

The class size statistics mirror the efficiency statistics, there are generally larger class sizes in the Fall than in the Spring.

Architecture	F11	23.2	S12	14.2
	F12	25.0	S13	17.7
	F13	26.5	S13	19.0
	F14	23.8		
Construction Management	F11	28.7	S12	19.7
	F12	19.0	S13	20.0
	F13	26.0	S14	21.0
	F14	28.0		

Low enrollment in S12 in the architecture program may be explained by the fact that we cancelled one of the advanced classes, so many students did not enroll for the other classes offered. In any event the trend is for increasing enrollment in the Spring semester with S13 reflecting the offering the introductory classes for the first time in the Spring semester. It should be noted that several of the architecture classes are offered in a lab that can seat only 24 students (it is difficult to allow extra enrollment in these classes to compensate for drops), and that Spring courses are advanced classes, which not all students are eligible for, or decide to take. S11 and F12 seem to be a low point of the construction enrollments. Perhaps the depressing state of the construction industry at that time helps to explain it...

Changes being made to both the Architecture and Construction Management programs are designed to focus our teaching and improve enrollment.

## 5.3 Instructional Productivity

### 5.3

#### Productivity Rate:

Architecture:	F10	12.6	S11	8.1
	F11	14.98	S12	9.57
	F12	15.4	S13	11.39
	F13	13.24		
Construction Management	F10	13.73	S11	11.36
	F11	9.73	S12	11.67

F12 14.37 S13 12.20

F13 14.93

The productivity rate for both of these programs is lower than the District goal of 18.7, with Construction slightly better than Architecture in some semesters and the other way around in others. Generally it is better in the Fall and not as good in the Spring - following enrollment trends. The information presented in the last two segments of the PRPP explains why this is so.

This is an area of concern to both programs. The architecture program was recalibrated to a two year pattern in 2011 (previously it was designed to be completed in 2 semesters). Although, due to low enrollment, only first year courses were offered in 12-13. It is a little early to tell if this will produce the improvement in enrollments sought. In addition, several of our classes are offered in labs with a maximum enrollment of 24, which does not permit 35 students to enroll.

Faculty are optimistic that once the Architecture program stabilizes and is articulated, and the revisions to the Construction Management program are implemented, productivity will improve. That was one of the motivators for undertaking program revisions.

## 5.4 Curriculum Currency

### 5.4

The Architecture curriculum is being revised - to be submitted in Fall 2014 - to reflect articulation requirements. Those courses requiring the six-year updating will be completed in Fall 2014. All courses have SLOs., and all courses (except Arch 2.3) have completed at least one SLO assessment - although not all of the assessments have been posted, apparently some have been "lost" in the submission process.

The revised Construction Management transfer program is under development and all curriculum will be submitted, with the revised program application in Fall 2014. Those courses requiring the six-year updating will be completed in Fall 2014.

## 5.5 Successful Program Completion

### 5.5

There is little data to report for the construction program as the certificates have been discontinued and the new degree program has not yet launched. However, a few students recently completed the degree, though none of them last year.

The architecture program recalibrated to a two year format and the new iteration of the program began in F 2013. F 2014 saw the second year of the new format. Over the past three years there have been 6 degrees awarded, one last year. In addition we have had several students successfully transfer - three in 2012, two in 2013.

The sequence of courses in the architecture program is set up so that there are typically 2 architecture to complete each semester, in addition to General Education courses, for each of the four semesters. The first year courses are pre-requisites for the second year courses, and typically fall courses are pre-requisites for spring courses. There has been some experimentation with allowing students to fast-track the architecture courses if they have completed their General Education courses, and, for the most part, that has been successful.

There are no licenses for these disciplines at this level of education.

## 5.6 Student Success

### 5.6

#### Retention:

Architecture	F10	45.9%	S11	62%
	F11	49.3%	S12	59.2%
	F13	62.3%	S13	72.4%
	F13	68.9%		

Construction Management	F10	79.8%	S11	78.8%
	F11	55.6%	S12	63.6%
	F12	40.7%	S13	78.6%
	F13	50%		

It is too early to tell what the retention rate will be for the Architecture Program once it stabilizes. However, it has been improving from the initial rate of the new program in F11. The new Transfer program is very demanding, and many more people like the idea of becoming an architect than like the hard work it takes to complete the program. Nationally the retention rate for architecture programs is around 50% in the first year, which we are doing slightly better than in the Fall semester - which is the start of the program each year. Retention is low in the Construction Program currently. However, once the revised Construction Major is implemented we are likely to see some improvement since a whole program will be available.

#### Course Success:

The course completion data mirrors the retention data... for the same reasons...

#### GPA:

GPA in the Architecture program is low, reflecting the number of students who decide not to complete courses because they have changed their minds about becoming an architect.

Most F's are awarded to non-completers. Although we have seen an improvement from the first offering of the transfer program, from 1.73 in 2011 to 2.54 in F 2013.

Grades in the Construction Program have been dropping, although not at a steady rate, from 2.5 in F 2011 to 2.18 in F 2013. Remember, there is no program for these students, so perhaps the interest is not as strong in the courses. Most F's are awarded to non-completers.

District-wide F 2011 was 2.63, F 2013 was 2.62.

Note: There are occasionally students who are not native English speakers and they do sometimes have difficulty in our classes, primarily in the construction courses...

## 5.7 Student Access

### 5.7

#### **Ethnicity:**

##### Architecture:

White participation has fluctuated: 60.4% in 10-11; 53.3% in 11-12; 41.2% in 12-13; 48.4% in 13-14

Hispanic participation has increased: 9.0% in 10-11; 26.1% in 11-12; 40.2% in 12-13; 34.3% in 13-14

Participation by other ethnicity groups remained fairly steady at low rates.

##### Construction:

White participation has fluctuated: 65.2% in 10-11; 67.4% in 11-12; 58.6% in 12-13; 62.7% in 13-14

Hispanic participation increased: 12.1% in 10-11; 18.6% in 11-12; 10.7% in 12-13; 22.7% in 13-14

Participation by other ethnicity groups remained fairly steady at low rates.

#### **Gender:**

##### Architecture:

Enrollment is primarily male averaging about 64%, females account for about 35%.

Construction: Males enrollment consistently around 83%, females vary around the 12% level, with unknown making up the difference.

Both of these fields are traditionally heavily male dominated. For example only about 10% of architects are women nation-wide. And the ratio is probably similar in construction management. These trends are reflected in our student gender data - though we have a greater participation of women than the national figures would predict.

## 5.8 Curriculum Offered Within Reasonable Time Frame

### 5.8

There is nothing to report about the construction program since the certificates have been discontinued and the degree program has not yet been implemented.

All courses in the architecture majors are offered on a regular rotational basis so that students can complete their programs within a reasonable time frame. The current plan looks like this:

Fall 1:	Spring 1
Arch 12	Arch 26 B
Arch 26A	Arch 27
(Arch 2.1)	(Arch 2.2)
Fall 2	Spring 2
Arch 25A	Arch 25B
Arch 60A	(Arch 2.1)
(Arch 2.3)	

## 5.9a Curriculum Responsiveness

### 5.9

Revisions to the curriculum for the Architecture program, to reflect articulation needs, will be submitted Fall 2014.

The final 2 courses for the revised Construction Management transfer program, and the degree documentation, will be submitted in Fall 2014. Implementation of the program is anticipated for 2015-16.

Most of our courses are discipline specific, however the Architecture History courses are accepted as Humanities credit for General Education and reflect a global approach to understanding the history of architecture.

Although both of the programs in this discipline area are transfer programs, a suggestion has been made to re-constitute the joint advisory committee to better address the needs of the community and promote the programs. That concept will be explored and implemented if found desirable.

## 5.9b Alignment with High Schools (Tech-Prep ONLY)

### 5.9b

Most of the articulated courses in this department that relate to programs at the high-schools are the beginning ApTech classes, not the more advanced Architecture or Construction Management courses. See ApTech.

## 5.10 Alignment with Transfer Institutions (Transfer Majors ONLY)

### 5.10

#### **Articulation:**

UC Berkeley has articulated all of our courses, except one. We are modifying the course so that it will achieve articulation. It will be re-submitted in Fall 2014.



Cal Poly Pomona does not participate in articulation, but considers the portfolio of each applicant.

Cal Poly SLO has not responded to our request for articulation - I understand that they do not have an active articulation officer at the present time...

Most of the Construction Management courses for the transfer program are already articulated. As we new courses for this program will be submitted for articulation. The final 2 new courses will be submitted in Fall 2014.

## 5.11a Labor Market Demand (Occupational Programs ONLY)

### **5.11a**

In both Architecture and Construction Management we are in transition from CTE Certificates to transfer degrees. Labor Market Demand data does not apply since we are not the final education site.

## 5.11b Academic Standards

### **5.11b**

As both the Architecture and Construction Management programs are in transition there has been some dialog among faculty regarding academic standards. Additional discussions will be undertaken as the programs develop.

## 6.1 Progress and Accomplishments Since Last Program/Unit Review

Rank	Location	SP	M	Goal	Objective	Time Frame	Progress to Date
0001	Santa Rosa	02	01	Establish a construction management transfer program and provide leadership for related other programs	Hire a new faculty member to do this	2014 academic year	Final 2 courses are ready to submit, but a faculty member has not been hired.
0002	Santa Rosa	04	07	Provide a professional working environment for students	New chairs for Lab 1752 New drafting table tops for 1752	Academic year 2013-14	\$16,000

## 6.2a Program/Unit Conclusions

<b>Location</b>	<b>Focus Areas &amp; Questions</b>
Santa Rosa	Using input from Advisory Committee members, professional organizations (like the AIA), and looking at employment needs of the future we decided to undertake a major revision of both the architecture and the construction management programs in response to changing economic and industry conditions. We have a new Architecture Degree Program as of Spring 2012 and are anticipating submitting a new Construction Management Program in Fall 2014.

## 6.2b PRPP Editor Feedback - Optional

### 6.3a Annual Unit Plan

Rank	Location	SP	M	Goal	Objective	Time Frame	Resources Required
0001	Santa Rosa	02	01	Complete revisions to architecture program to enable articulation with UC Berkeley	Submit revised curriculum in Fall 2014 for SRJC approval Submit required portfolio of student work to UC Berkeley once curriculum is approved	2014 academic year	Time...
0002	Santa Rosa	02	01	Establish a construction management transfer program and provide leadership for related other programs	Submit curriculum of final 2 courses for approval Fall 2014 Submit application for a major in Fall 2014 Hire a faculty member to coordinate the program and teach in the major	2014 academic year	Salary and benefits - office and other resources already exist
0003	Santa Rosa	04	07	Provide a professional working environment for students	New chairs for Lab 1752 New drafting table tops for 1752	Academic year 2013-14	\$16,000
0004	Santa Rosa	08	07	Prepare for retirement of architecture program faculty member and CADD program faculty member	Consolidate leadership for architecture and CADD programs in one person (reduce from 2 to 1) to guarantee program continuity and leadership.	Academic year 2015-16	Salary and benefits (which will be less than paying the 2 faculty members currently doing this work); office and other resources already exist
0005	Santa Rosa	08	07	Select a name for the department	Reflect the programs that are in the department	Academic year 2015-16	May need to hire a facilitator to help faculty resolve their differences...